

**METHOD AND APPARATUS FOR PROPER ORDERING  
OF REGISTRATION DATA**

**ABSTRACT**

- 5        A photomask or reticle including a unique set of alignment attributes at separate and  
distinguishable field points is put in the reticle plane of a photolithographic projection  
system. The reticle pattern is exposed onto a resist coated wafer or substrate and processed  
through the final few steps of the photolithographic process. The resulting array of  
alignment attributes are then measured using a standard optical overlay metrology tool. The  
10      overlay tool is driven by a set of software instructions. By comparing the resulting overlay  
data to the placement error encoded on the reticle it can determined if the data has been read  
or displayed in the correct order.

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